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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,541	11/25/2003	Jong Seok Kim	0465-1078P	4388

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EXAMINER

HECKERT, JASON MARK

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/720,541	KIM ET AL.	
	Examiner	Art Unit	
	Jason Heckert	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 27-30 is/are rejected.
- 7) ☐ Claim(s) 18-26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 and 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regards to claim 7, it is not clear what dimension the word "smaller" refers to. Please rewrite the claim clearly describing the invention.
3. In regards to claim 14, it is not clear how the flange extends from the object, as a concave surface does not have linear edges. Please rewrite the claim clearly describing the invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1-3, 6 rejected under 35 U.S.C. 102(b) as being anticipated by Martin. Martin discloses a washing machine with a housing 119, a tub 24, a drum 95, and a check valve 175 installed in the water inlet 173 that prevents the back flow of soap suds (col. 6 line 24-25). Martin discloses that said check valve can be used for unidirectional airflow as well (col 1. line 22-24). As seen in figure 4, check valve 175 is installed in an

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opening and in chamber 174, which can be considered an extension that is in fluid connection with conduit 173.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4-5, 7, 8, 9, 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Powell. Martin discloses a washing machine with a check valve in connection with the water inlet, however he does not claim said check valve to be a float valve. It is well known in the art that float valves are a common type of check valve. Powell discloses a check valve with a floating member 22 that has a concave surface. Furthermore, cap member 12 and sleeve members 13 guide and restrict movement of the float member. Powell also discloses protrusions extending from float seat 21, serving the function of a rib narrowing the diameter of the pipe. It would have been obvious to one skilled in the art at the time of the invention to modify Martin, to include a float valve of the type that Powell discloses in fluid connection with the water inlet of a washing machine, as they are common and well-known substitutes that provide unidirectional fluid flow.

8. In regards to claim 7, Martin discloses a valve that is small enough to fit in the opening of the tub, but greater in diameter than that of the pipe in fluid connection with

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the tub. Martin does not disclose that it is a float type valve. Powell, as stated in the previous paragraph, discloses the use of float type valves for unidirectional flow. It would have been obvious at the time of the invention, to combine both Powell and Martin, in order to create a float valve of similar dimensions to Martin's check valve thereby providing another means for unidirectional flow in Martin's washing machine.

9. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Zinkann et al. Martin does not disclose the use of a bellows pipe in his washing machine. Zinkann et al. disclose a washing machine with a bellows piped disposed in the fluid line between the detergent dispenser and the tub as well as a float valve disposed in between the bellows pipe and the opening to the tub. It would have been obvious to one skilled in the art, at the time of the invention, to include a bellows pipe, as it is a common type of piping used in fluid transfer.

10. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Powell and further in view of Smith. Neither Martin nor Powell disclose a shaft on their float or check valve. Smith discloses a float valve (figure 2) with a float 80 that clearly has a shaft portion extending from it so as to properly orient the float in the seat. This type of float is commonly used throughout the art. It would have been obvious to one skilled in the art to modify Martin to include a float with a shaft, as taught by Smith, to stabilize the movement of the float.

Allowable Subject Matter

11. Claim 18-26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The structural limitations describing the float member and receiving hub are specific enough that they can be considered novel.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1, 2, 4-6, 10-17, 27-30 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/746155. Although the conflicting claims are not identical, they are not patentably distinct from each other because both describe a

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washing machine with a float valve type assembly comprising a cylindrical hub with a plurality of ribs in connection with the water inlet. In the hub, a hemispherical head is attached to a hollow shaft that moves along a guide. Furthermore, both inventions disclose a device capable of intercepting air to prevent the false operation the float. Both devices perform the same function of bubble dissipation.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heckert whose telephone number is (571) 272-2702. The examiner can normally be reached on Mon. to Friday, 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH

A handwritten signature in black ink, appearing to read 'Michael Barr', with a stylized, sweeping underline.

**MICHAEL BARR
SUPERVISORY PATENT EXAMINER**